



The State of New Hampshire  
DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

April 3, 2008

The Honorable Martha Fuller Clark, Chairman  
Senate Energy, Environment and Economic Development Committee  
Legislative Office Building, Room 102  
Concord, NH 03301

**Re: HB 1405-FN relative to regulating outdoor wood-fired hydronic heaters**

Dear Chairman Fuller Clark and Members of the Committee:

The Department of Environmental Services (DES) is pleased to offer testimony in support of House Bill 1405, as amended, which establishes requirements for the sale and use of outdoor wood-fired hydronic heaters, also known as outdoor wood boilers. Over the past few years, DES has followed the efforts undertaken by regional organizations, states, municipalities and the U.S. Environmental Protection Agency to assess the environmental and health impacts of outdoor wood-fired boilers.

Due to many factors, outdoor wood-fired boilers are increasingly becoming the primary method of providing space heating for some homes and other buildings. These devices also serve as a year-round heating source of hot water, swimming pools and hot tubs. Over the past few years, DES has received a growing number of complaints from citizens who live near private residences and commercial entities that use outdoor wood-fired boilers. The basic design of many outdoor wood-fired boilers on the U.S. market today causes the fuel to burn incompletely, resulting in smoke and high particulate emissions. This incomplete combustion increases the release of harmful air pollutants to the atmosphere and the resulting smoke often creates a nuisance condition.

In March of 2006 (revised June 2006), the Northeast States for Coordinated Air Use Management (NESCAUM) published a report titled: "Assessment of Wood-Fired Boilers." Based upon sales data obtained from outdoor wood-fired boiler manufacturers, NESCAUM estimated that national sales of these units have been growing during the past five years at rates of 30-128 percent and estimated that 1,981 of these units had been sold in New Hampshire since 1990.

In 1988, the U.S. Environmental Protection Agency adopted New Source Performance Standards for Residential Wood Heating Devices, including woodstoves and pellet stoves. These standards apply to all devices manufactured after 1990 and sold after 1992 and establish particulate emission limits and compliance testing requirements. However, these mandatory federal emission standards do not apply to outdoor wood-fired boilers. In January 2007, the EPA announced that it had entered into a Voluntary

Partnership Agreement with ten outdoor wood-fired boiler manufacturers, which account for the manufacturing of 80 percent of the units sold in the U.S., to establish a voluntary program whereby the manufacturers agreed to make cleaner models available to consumers beginning in the spring of 2007. Under the agreement, the new models must meet a Phase I emission level of 0.6 pounds of particulate per million BTUs of heat input (i.e. wood burned). Further, EPA has announced its intention to adopt a more stringent Phase II voluntary emission limit of 0.32 pounds of particulate per million BTUs of heat output, effective March 31, 2010. Under the EPA voluntary program, the models must be tested by an accredited third party to verify that they meet these emission levels. These new, cleaner units are then identified by an orange tag that shows how that specific model compares to the EPA performance specifications.

HB 1405, as amended, has three major components. In particular, the bill establishes Phase I and Phase II emission limits that mirror EPA's voluntary program for units that are sold in the state, specifies the permitted fuels that can be burned, and clarifies that municipalities can adopt and enforce land use ordinances and regulations pursuant to RSA 674 and 675 and prevent and remove nuisances in accordance with RSA 147. Lastly, the bill requires DES to review emerging outdoor wood boiler technology, including the achievable emission limits and emission rates and report its findings and recommendations on an annual basis to the air pollution advisory committee established pursuant to RSA 125-J:11.

Thank you for the opportunity to provide testimony. Should you have further questions or need additional information, please feel free to contact Robert R. Scott, Director, Air Resources Division (271-1088, [robert.scott@des.nh.gov](mailto:robert.scott@des.nh.gov)) or Pamela G. Monroe, Compliance Bureau Administrator, Air Resources Division (271-0882, [pamela.monroe@des.nh.gov](mailto:pamela.monroe@des.nh.gov)).

Sincerely,



Thomas S. Burack  
Commissioner

Cc: Members of Senate Energy, Environment and Economic Development Committee  
Senator Harold W. Janeway  
Representative Gilman Shattuck  
Representative David Essex  
Representative Ron Mack  
Representative Barbara French  
Representative Arthur Jillette